

FIG.1

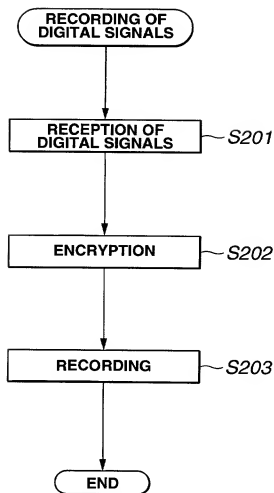


FIG.2A

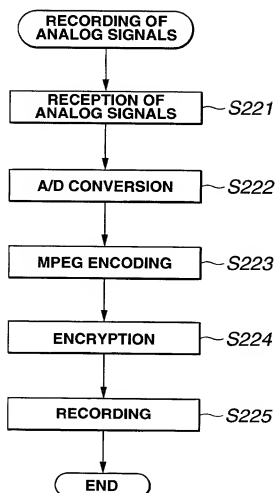
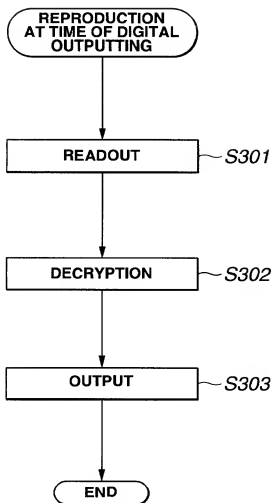
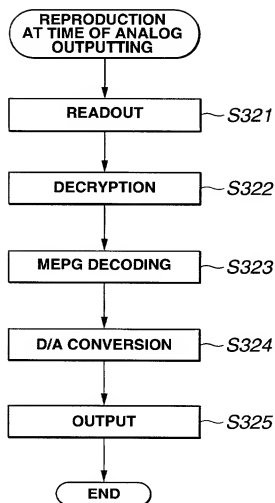


FIG.2B

**FIG.3A****FIG.3B**

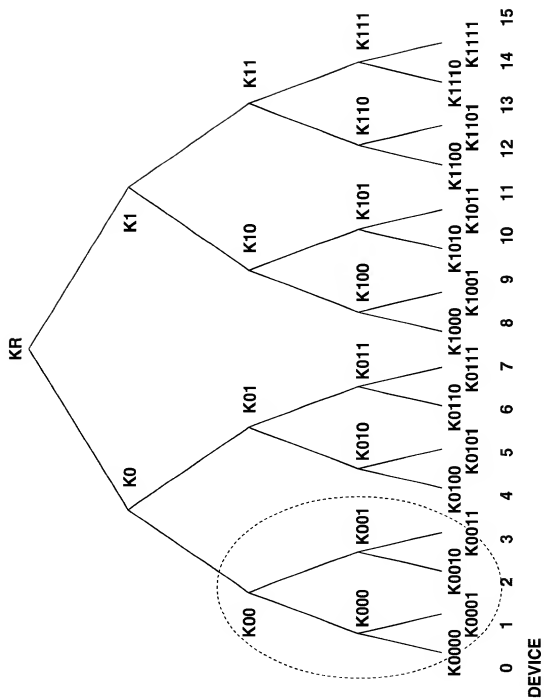


FIG. 4

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KRB : Key Renewal Block INSTANCE 1
SEND ROOT KEY $K(t)R$ AT TIME t TO DEVICES 0, 1, 2

GENERATION : t	
INDEX	ENCRYPTED KEY
0	$Enc(K(t)0, K(t)R)$
00	$Enc(K(t)00, K(t)0)$
000	$Enc(K000, K(t)00)$
001	$Enc(K(t)001, K(t)00)$
0010	$Enc(K0010, K(t)001)$

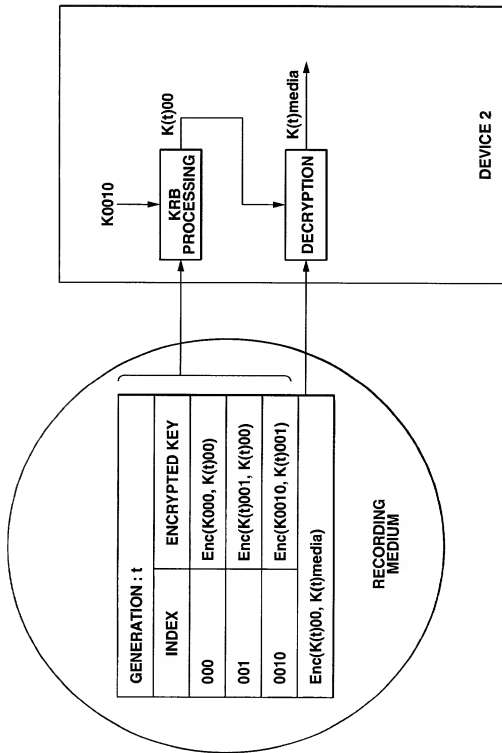
FIG.5A

KRB : Key Renewal Block INSTANCE 2
SEND ROOT KEY $K(t)R$ AT TIME t TO DEVICES 0, 1, 2

GENERATION : t	
INDEX	ENCRYPTED KEY
000	$Enc(K000, K(t)00)$
001	$Enc(K(t)001, K(t)00)$
0010	$Enc(K0010, K(t)001)$

FIG.5B

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**FIG.6**

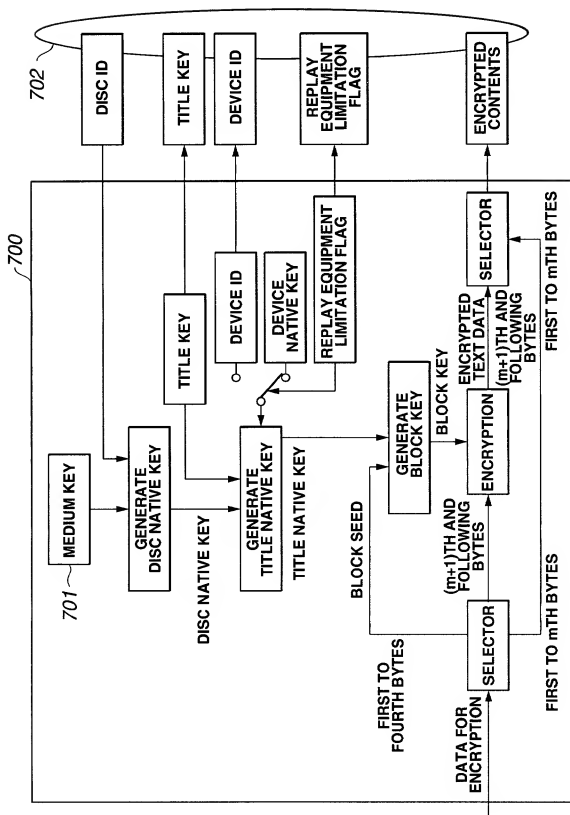
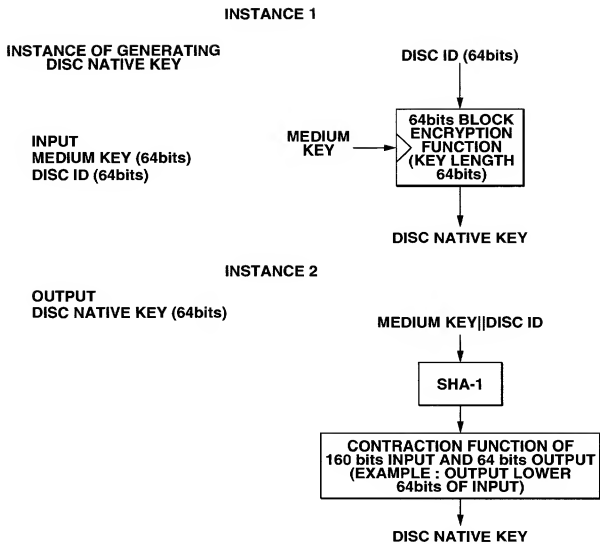


FIG. 7

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**FIG.8**

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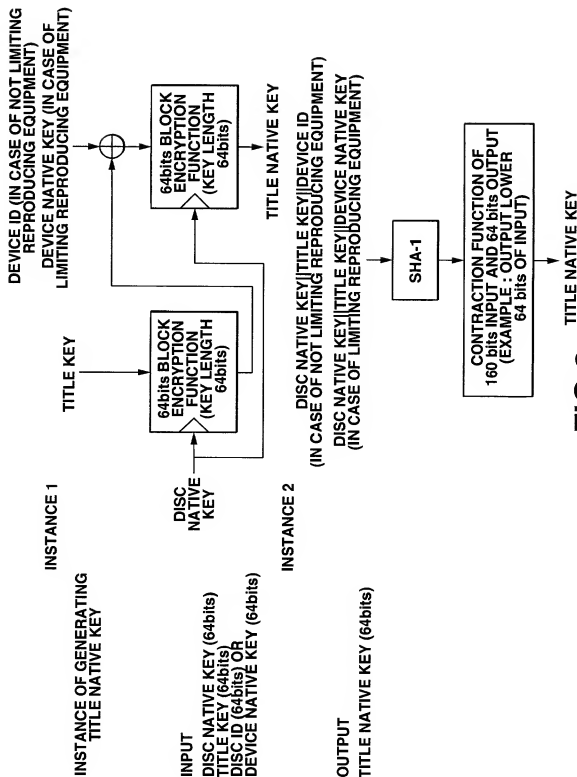
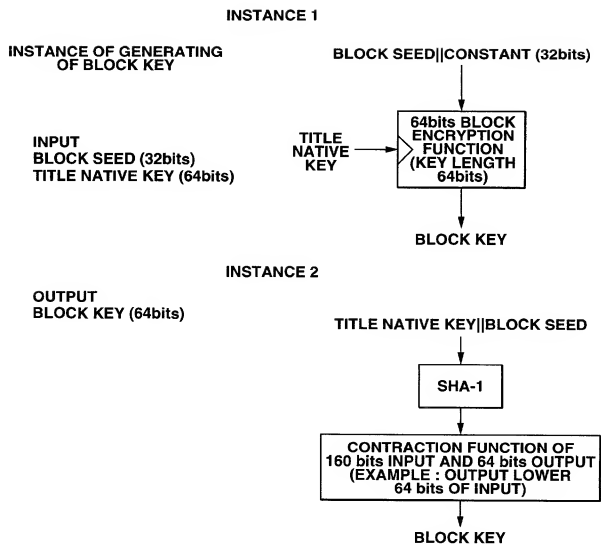


FIG.9

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**FIG.10**

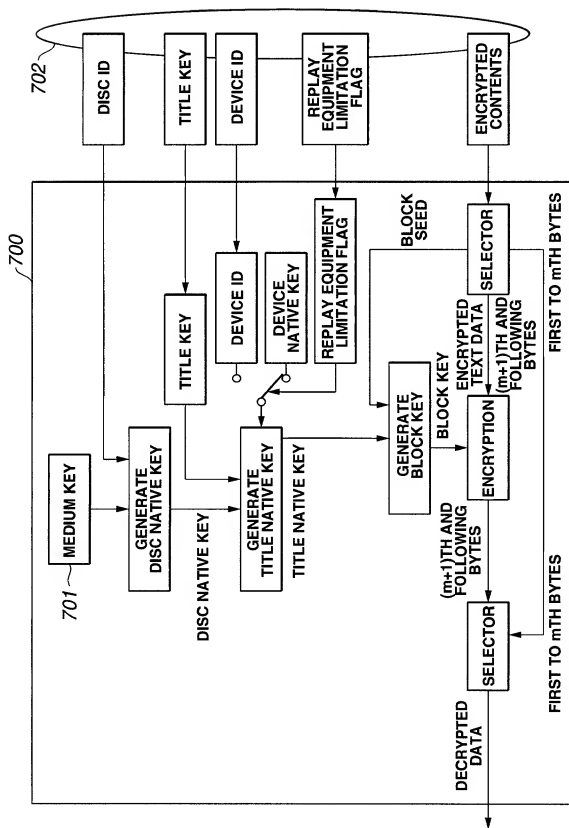


FIG. 11

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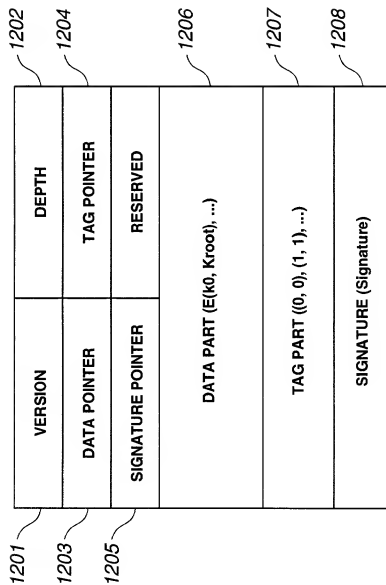


FIG.12

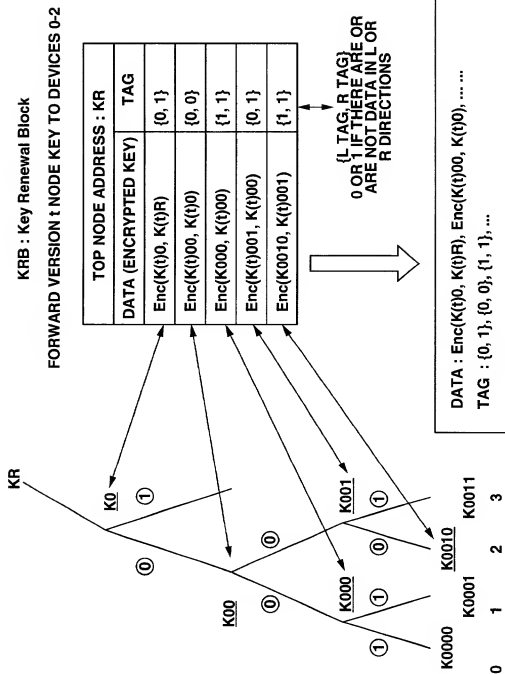


FIG.13

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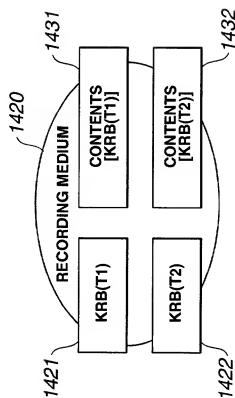


FIG. 14A

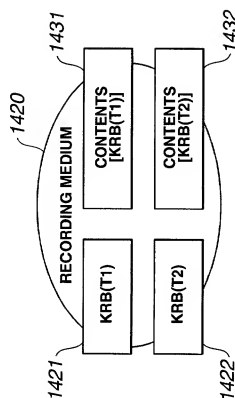
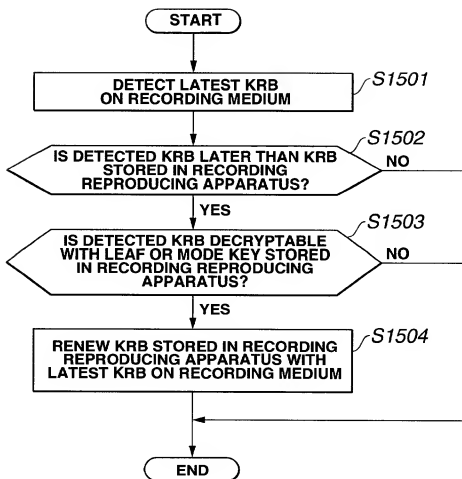


FIG. 14B

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**FIG.15**

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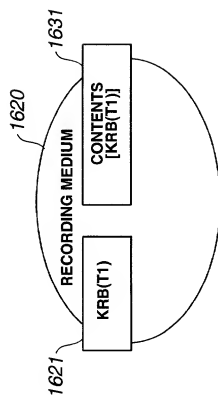


FIG. 16A

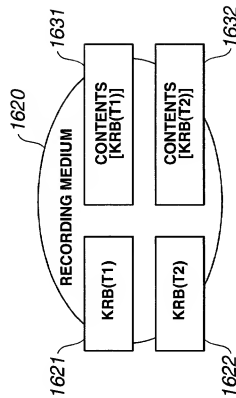
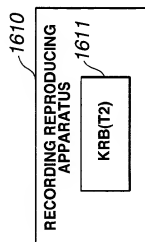
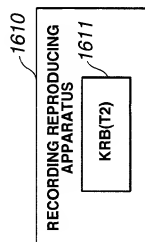


FIG. 16B



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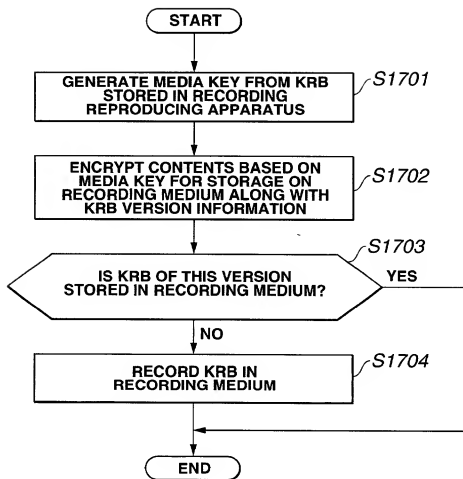


FIG.17

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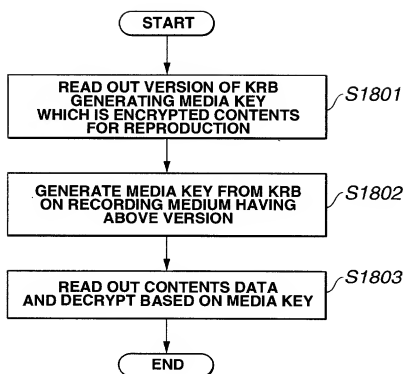
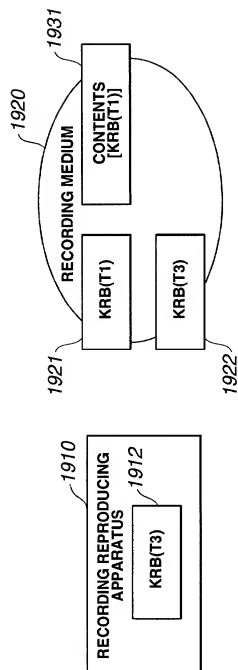
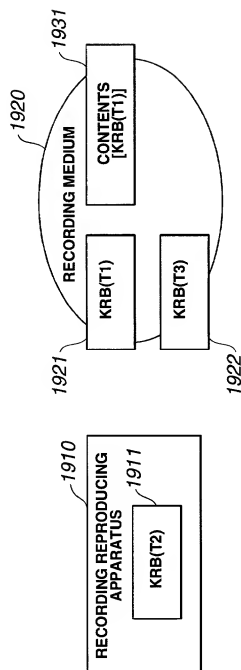
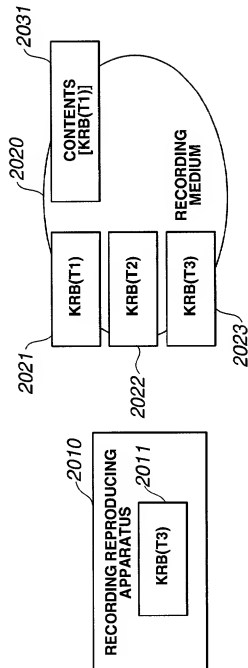
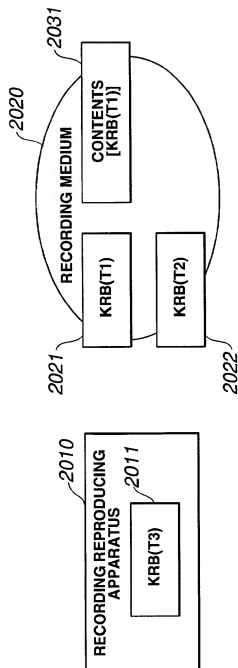


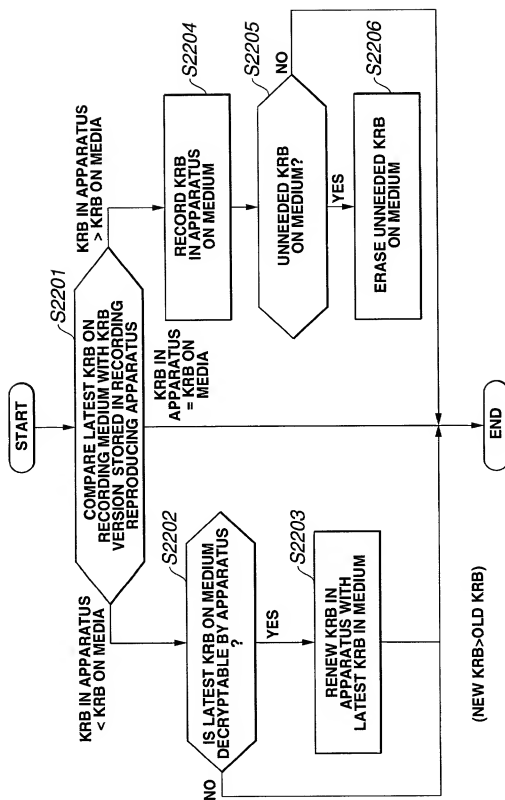
FIG.18

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**FIG.22**

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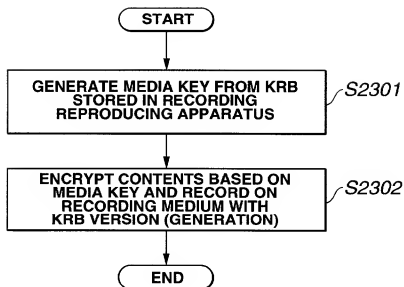
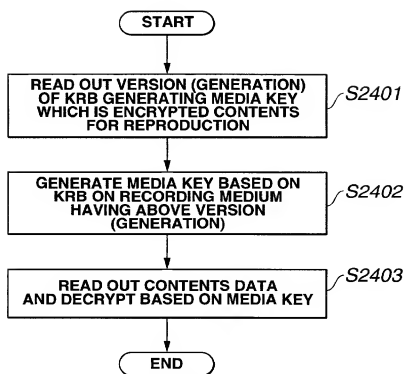


FIG.23

**FIG.24**

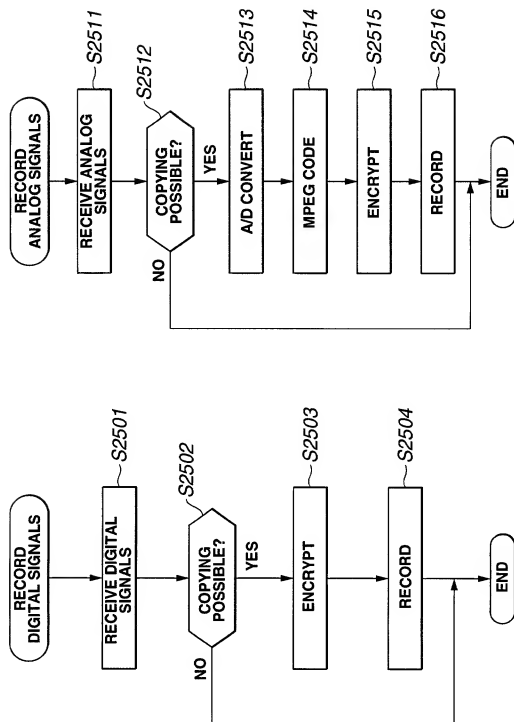


FIG. 25B

FIG. 25A

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